

NOTES AND DESCRIPTIONS OF NEW SPECIES OF THE GENUS  
PSEUDOTETRALOBUS.

FAMILY ELATERIDAE; SUBFAMILY TETRALOBIDES.

By ALBERT H. ELSTON, F.E.S.

[Read August 9, 1928.]

The subfamily Tetralobides originally contained only one genus, *Tetralobus*, the geographical distribution of which was spread over Africa, Madagascar, Australia and New Guinea; the greatest number of species coming from the first-mentioned country. The species, however, from the Ethiopian Region vary in structural characters from those of the Australian Region, the chief difference being that the species from Africa have the head in the forepart margined, whereas the Australian species, comparatively, have not an elevated margin on the anterior part of the head. Another very important difference between the African and the Australian species is that the former all have eleven-jointed antennae, and the latter with distinctly twelve joints, with the exception of some female specimens of *Pseudotetralobus australasiae*, Gory, which have only eleven joints. It was chiefly upon these two structural differences that Schwarz<sup>(1)</sup> separated these two groups and proposed the new generic name *Pseudotetralobus* for those species belonging to the Australian Region.

Blackburn,<sup>(2)</sup> in his Note on the above genus, considered the following five species as one: *P. australasiae*, Gory; *P. manglesi*, Hope; *P. fortnumi*, Hope; *P. cylindriciformis*, Cand.; and *P. murrayi*, Cand., whereas this paper treats them as three separate species; *manglesi* and *cylindriciformis* being synonymous to *australasiae* and *fortnumi*, respectively. The reasons for this distinction are given separately under the headings of each species.

PSEUDOTETRALOBUS ALBERTISI, Cand.

This species, which is the most easily distinguished one in the genus, was named from a female specimen; the male was unknown to Candèze, whereas the present author has only seen males, and these agree very well with the description given of the female, except that the antennae are elongately lamellate from the fourth joint. The pronotum of this species is its main distinguishing feature; it is almost quadratic in shape, being very slightly narrower posteriorly than in the forepart; with large, deep rugose punctures; the longitudinal median line is lightly impressed along the whole length; the surface is uneven, but usually having four distinct depressions, one on each side of the median line near the middle, midway between the latter and the lateral margins, the other two near the posterior fourth, one on each side of the median line, but situated nearer to the lateral margins; the posterior angles have no inside carina. The elytra are distinctly striated, the striae with scattered, almost obsolete punctures; the interstices moderately wide and lightly convex, with densely arranged, small, round punctures; the apices distinctly mucronate. Length, 29-31 mm.; width, 7-8 mm.

(1) Stett. Ent. Zeit., 1902, p. 210.

(2) Proc. Linn. Soc. N.S. Wales, 1888, p. 1416.

## PSEUDOTETRALOBUS AUSTRALASIAE, Gory.

The above species is distinguished from *P. fortnumi*, Hope, by its much wider form; the pronotum more quadratic in shape and its posterior angles less acute, not so conspicuously produced backwards and less divergent. It more closely resembles *P. murrayi*, Cand., but may be easily separated from that species by its slightly less elongated form and the shape of its pronotum and the posterior angles of same; in *murrayi*, the sides of the pronotum are strongly contracted in front of the posterior angles which are strongly produced backwards (more so than in *fortnumi*), acute and strongly divergent, whereas in *australasiae* the lateral margins of the pronotum are lightly sinuate in front of its posterior angles which are only slightly produced backwards. The female of this species shows a great variability in the last two joints of the antennae. On some specimens these two joints are quite separate, the twelfth joint articulating on the eleventh (fig. 1); on other specimens these two joints have cohered together, one not articulating on the other, but nevertheless showing a distinct suture marking the cohesion of these joints (figs.

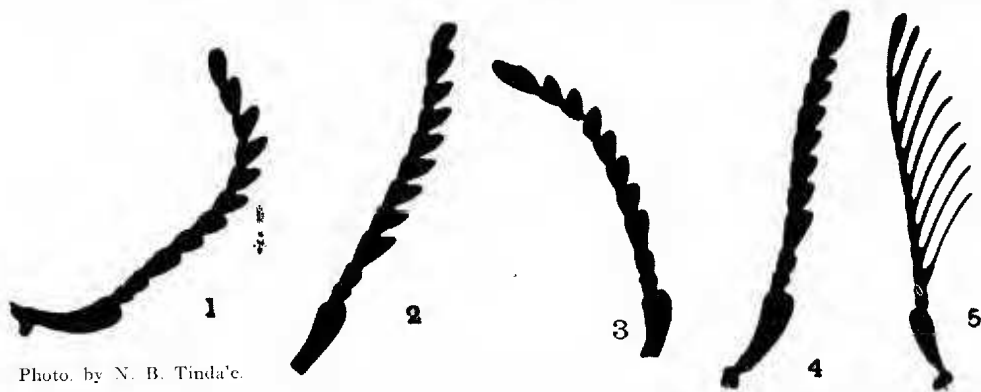


Photo. by N. B. Tindale.

Antennae of *Pseudotetralobus australasiae*, Gory. Figs. 1-4, female; fig. 5, male.

2 and 3); on another specimen (fig. 4) the cohesion of the joints is perfect, there being only a slight emargination to show where agglutination has taken place; the antennae of the male appears to be consistently twelve-jointed (fig. 5).

## PSEUDOTETRALOBUS FORTNUMI, Hope.

This species can be easily distinguished from *australasiae* and *murrayi* by its more elongate appearance, particularly with the female. The elytra of the males have more or less strongly impressed striae which are impunctate, except near the apex, where there are a few large, round punctures; the interstices are lightly convex and closely covered with rather large, moderately deep, subrugose punctures. The females have their elytral striae more or less uniformly punctured.

## PSEUDOTETRALOBUS MURRAYI, Cand.

The above species was named from a female only; the male differs from the female in being slightly more narrow in proportion, the antennae elongately lamellate from the fourth joint, nonfoveate on the vertex of the head, the longitudinal median furrow of the pronotum faintly impressed with a more conspicuous fovea in the middle, the posterior angles of the pronotum slightly larger and more divergent. This species can at once be separated from *P. australasiae*, Gory, by the more uneven surface of the pronotum, the posterior

angles of the latter being much more elongated, strongly divergent and produced backwards, and with the elytral striae less deeply impressed. The males of *murrayi* and *fortnumi* closely resemble each other, but may be distinguished by the former being more robust, proportionately wider, and the punctures on the elytra more distinct, whereas on the latter the punctures are not individually distinct but have a transverse rugose appearance; the females of these two species are very distinct and could not be easily confused. *fortnumi* is a more elongate insect, more convex, both above and below, which gives it a cylindrical or tubular appearance, and with the prothorax longitudinally impressed in the middle.

PSEUDOTETRALOBUS CORROSUS, Cand.

This is a very distinct species. I have seen a large number of males but only one female; the elytral sculpture of the former varies somewhat, the punctures in the striae are much more deeply impressed on some than on others, also the interstices of the striae vary in their convexity. The female specimen before me differs from the males by being somewhat darker in colour, larger and more robust, and with the antennae pectinate instead of being elongately lamellate.

PSEUDOTETRALOBUS QUADRIFOVEATUS, MacL.

The specimen before me, through the courtesy of Mr. H. J. Carter, has been compared with the type. The pronotum, however, is as wide as long (actual measurements), although it appears to be longer than wide. It seems to me that Macleay, in some of his descriptions, did not actually measure his specimens but trusted to his eye, because I have noticed this discrepancy on two or three previous occasions.

The above species, in general appearance, closely resembles *P. corrosus*, Cand., but may be distinguished from that species by the posterior angles of the pronotum not being so strongly produced backwards, the longitudinal depression on the head shorter, the interstices of the elytral striae more convex and less densely punctured, and the sutural angles of the elytra more acutely mucronate.

PSEUDOTETRALOBUS PUMILIS, Cand.

The author in his description of this species distinguished it from *P. corrosus*, Cand., not only by its much smaller size but chiefly on account of it having only two impressions on the pronotum instead of four. I have before me two specimens from North Queensland which are, without doubt, conspecific with the insect described as *pumilis*, but both of these have four impressions on the pronotum similar to those on *corrosus*; however, notwithstanding this similarity, I still think it desirable that these two names should stand, although the former may prove to be only a variety of the latter. I am not considering the separation of these two species on the disparity of size only, there is also a distinct difference in the punctures on the pronotum. *P. pumilis* has the pronotum more densely punctured than *P. corrosus*, the punctures not only being more contiguous to each other but also having a much more rugose appearance; the longitudinal median impression on the former is almost obsolete, whereas on the latter it is more or less deeply impressed.

*Pseudotetralobus castaneus*, n. sp.

♂. Elongate; subnitid, castaneous, with the head, pronotum and prosternum slightly darker than the rest of the body; moderately densely clothed with very short, depressed golden hairs, except on the posterior part

of pronotum, scutellum and metasternum, where they are much longer and more tomentose. Head elongate, in forepart narrowed and with a large, deep depression, longitudinally furrowed in the middle; closely and irregularly punctured, the punctures more densely arranged in the forepart than on vertex. Pronotum (across posterior angles) wider than long, convex, the longitudinal median furrow lightly impressed except in the middle where there is a more or less deep depression, the lateral margins convexly curved on the anterior half and widely sinuate on the posterior half, with two large, deep depressions just in front of the middle and situated one on each side of the median line and midway between the latter and the sides and with two shallow depressions (similarly situated) behind the middle, the posterior angles are large and acute, slightly divergent and produced backwards well behind the shoulders and with a well-defined carina extending upwards to the middle of the sinuosity; with moderately large, deep, irregular punctures, those on the posterior half much smaller and more densely arranged than those on the anterior half. Scutellum elongately cordate, lightly concave, and with densely arranged, moderately large and deep punctures. Elytra at base narrower than width of pronotum and about three and a half times as long as the latter, lightly convex, minutely mucronate at the sutural angles, barely punctate-striate, the interstices almost flat and with densely arranged, minute punctures. Length, 30-37 mm.; width, 9-11 mm.

Queensland: Cunnamulla (H. Hardcastle). Northern Territory. Type, in South Australian Museum.

A species that could not be easily confused with any other in the genus: it is very conspicuous by its colour and the obsolete striae of the elytra are each marked with a row of small, black, irregular spots, which are more distinct on some specimens than on others; the antennae are elongately lamellate.

***Pseudotetralobus apicipennis*, n. sp.**

♂. Elongate; subnitid; dark castaneous, with the antennae and elytra of a slightly lighter shade; rather densely clothed with short, depressed, griseous-yellow hairs—except near base of pronotum, metasternum and sides of abdomen, where they are longer and more or less tomentose. Head longer than wide and narrower in forepart than behind, with a moderately deep, elongate depression extending from the anterior margin up to the posterior third; with rather large, deep, round punctures more crowded in forepart than behind; the antennae are elongately lamellate from the fourth joint, the second and third joints are very small. Pronotum about as long as the width (across posterior angles), evenly convex, the longitudinal median line only impressed near the middle, with two shallow transverse depressions just in front of the middle and situated one on each side of the median line and about midway between the latter and the sides; the lateral margins lightly rounded near the middle, only very slightly roundly contracted near the anterior angles and widely sinuate in front of the posterior angles which are moderately large, acute, divergent and produced backwards, with a well-defined carina extending (inside the lateral margin) up to about the middle of the pronotum; with closely placed, large, deep, almost reticulate punctures, near the lateral margins more crowded and confused and posteriorly much denser and smaller. Scutellum elongate, concave, attenuated posteriorly, with moderately large, round punctures. Elytra across shoulders slightly narrower than pronotum across posterior angles and about three and one-third times as long, sides almost straight and parallel to near the middle then gradually roundly contracted to apex, which is strongly mucronate; punctate-striate, the striae

comparatively deep and with closely placed, moderately large and deep punctures, the interstices are wide and lightly convex, with densely arranged, minute, transversely rugose punctures. Length, 25-28 mm.; width, 7-9 mm.

Western Australia: Eucla. Type, in South Australian Museum.

This insect is quite distinct from any other previously described species of the genus. The apices of the elytra differ from the other species known to me; instead of being rounded or emarginate, either with or without a mucronate process at the sutural angles, as is the case with other species; the elytra, from near the middle, are gradually attenuated and terminate with a large mucronate process, and with the sides in front of the latter feebly sinuate. I have seen no females of this species.

***Pseudotetralobus sulcicollis*, n. sp.**

♂. Elongate; subnitid; dark brown with the head and prothorax fuscous, antennae testaceous (except basal joint which is ferruginous), legs ferruginous, rather densely clothed with short, depressed, subseriate, golden hairs, longer near base of pronotum and on metasternum but not tomentose. Head elongate and not much narrower in forepart than behind; with a large, deep, triangular depression, the apex of which reaches up to just beyond the middle; with large, deep, closely placed, irregular punctures, in forepart more densely arranged and subrugose. Pronotum about as long as wide, surface very uneven and lightly convex, inside lateral margins widely flattened, with a well-defined, deep, longitudinal median furrow extending almost the whole length; with two moderately large, deep depressions just in front of the middle and situated one on each side of the median line and about midway between the latter and the lateral margins, also with two larger, but more shallow, subbasal depressions similarly situated, and with two deep, transverse basal depressions, one on side of the basal tubercle; the lateral margins evenly rounded, the widest part being just behind the anterior angles, widely, but not deeply, sinuate in front of the posterior angles which are acute, moderately divergent and produced backwards and with an indistinct carina; with large, deep, closely-placed punctures. Scutellum elongate, narrowed posteriorly and rounded at apex, concave, densely covered with moderately large, deep, subreticulate punctures. Elytra across shoulders barely wider than pronotum across posterior angles and about thrice as long, sides almost straight and parallel to near apex and more or less abruptly roundly contracted, apex briefly mucronate at sutural angle; rather deeply punctate-striate, the striae with large, shallow punctures, the interstices costate and closely covered with small, round, deep punctures. Length, 25-30 mm.; width, 8-9 mm.

Queensland: Stewart River (H. M. Hale, N. B. Tindale). Moa Island (G. A. Luscombe). Type, in South Australian Museum.

This is a very distinct species and could not be easily associated with any other of the genus known to me. It might possibly be allied to the insect Candeze described as *capucinus*, but as the description of the latter species is very vague and brief, it would be impossible to compare them without first referring to Candeze's type. I have seen no females of this species.

***Pseudotetralobus punctipennis*, n. sp.**

♂. Elongate; subnitid; dark reddish-brown, antennae fulvous (except first three basal joints which are reddish), legs ferruginous; rather densely clothed with short, subseriate, golden hairs, on metasternum and abdomen they are longer (but not tomentose) and more or less sericeous. Head not

longer than wide, narrower in forepart than behind, with a large, moderately deep, triangular depression extending from the base up to beyond the middle; with rather large, deep, subreticulate punctures, smaller and more or less rugose in forepart. Pronotum as long as wide, lightly convex, depressed inside lateral margins, the longitudinal median furrow only clearly defined near the middle; with two large, deep, transverse depressions in front of the middle, situated one on each side of the median line and midway between the latter and the lateral margins, and between each of these depressions and the sides of pronotum is a moderately large and deep longitudinal depression, the surface of the posterior fourth is more or less uneven; the lateral margins roundly dilated in front of the middle, abruptly, almost angularly, sinuate in front of the posterior angles which are acute, divergent and produced backwards, bicarinate, the outside earina very strongly marked and extends upwards almost to the anterior margin, the inside carina less clearly defined, shorter and extends along the basal margin; with closely arranged, moderately large and deep punctures, behind the middle subreticulate. Scutellum elongate, concave, attenuated behind and densely punctured. Elytra across the shoulders about the width of pronotum and a little less than thrice the length of the latter, deeply impressed inside the humeral angles, sides almost straight and parallel to beyond the middle than gradually, roundly contracted to apex which is emarginate and briefly mucronate at the sutural angles; deeply punctate-striate, the interstices closely and minutely punctured, costate on the basal half and transversely rugose. Length, 26-31 mm.; width, 8-10.5 mm.

North-West Australia: Derby (W. D. Dodd). Type, in South Australian Museum.

This species should be easily distinguished from its congeners by the shape of its pronotum, the deep striae on the elytra and the interstices of same strongly costate on the basal half. I have seen no females of this species. In general appearance it somewhat resembles *P. sulcicollis*, Elston, but has the punctures on the pronotum much finer and the carina very strongly marked.

***Pseudotetralobus conspectus*, n. sp.**

♀. Elongate; head and pronotum nitid, remainder subnitid; reddish-castaneous, abdomen paler, joints four to twelve of antennae testaceous, the three basal ones and legs reddish; both upper and under surface without clothing, except the posterior margin of pronotum and base of elytra, where there are a few scattered golden hairs and the anterior margin of pronotum has a conspicuous fringe of short hairs of the same colour. Head elongate, narrower in forepart than behind, anterior margin lightly bisinuate, with a large, deep, triangular depression, the apex of which extends upwards to beyond the middle; with irregularly (but not closely) placed, moderately large, round, deep punctures. Pronotum as wide as long, convex, narrowly depressed inside lateral margins, the longitudinal median furrow deeply impressed from the anterior margin to near the base where it terminates in front of an elongate, conspicuous tubercle; with six clearly-defined depressions, three on each side of the median line and situated about midway between the latter and the sides, two are near the anterior fourth, the intermediate ones are just in front of the middle, and the remaining two are near the posterior fourth, there is also a shallow, elongate depression inside each of the lateral margins; the latter evenly rounded, and they are at their widest distance apart near the anterior third, widely and lightly sinuate in front of the posterior angles which are very small, very slightly divergent and barely perceptibly produced backwards, the inside carina is very feeble, almost obsolete; with scattered,

moderately large and deep, stipple-like punctures, much smaller and more crowded on the posterior fifth. Scutellum cordate, strongly concave; with densely arranged, small round punctures. Elytra across shoulders slightly wider than pronotum across posterior angles and a little more than thrice the length of the latter, lightly impressed inside the humeral angles, sides almost straight and parallel to beyond the middle and then gradually, roundly contracted to apex which is almost imperceptibly emarginate and very briefly mucronate at the sutural angles; lightly striate, the punctures in the striae only just perceptible near the base and the lateral margins, elsewhere obsolete, the interstices are wide and flat, densely covered with minute, stipple-like punctures. Length, 36 mm; width, 10.5 mm.

North-West Australia: From the collection of J. S. Clark. Type, in author's collection.

Although there is only a female specimen before me, I have not hesitated to describe it as a new species because it is so unlike any other hitherto known member of the genus. The entire absence of clothing on both the upper and under surface is very unusual, and at once distinguishes this species from all its congeners; this lack of clothing is not, in my opinion, due to abrasion. The nitid pronotum is also characteristic, and it appears to the eye to be longer than wide, although by measurement the width at its widest part is quite equal to the length.

---